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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,788	12/11/2000	Masayuki Kondo	Q62242	2735

7590

07/22/2003

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

13

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,788

Applicant(s)

KONDO, MASAYUKI

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on June 18, 2003. These drawings are approved.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipate by Richardson (4,204,896).

Richardson teaches an apparatus for forming joints between cables or electrical conductors, comprising an upper mold (9 & 16) having an inner space with a dome-shaped ceiling face (Fig. 3, 7), which defines an upper part of a molding cavity, a lower mold (3) having an inner space provided with vertical side faces (6) and a bottom face (5) which defines a lower part of the molding cavity; wherein the dome-shaped ceiling face of the upper mold has a curvature (7) for forming a curvature of an outer face of the joint.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Birchler et al (4,043,027).

Birchler et al teach an apparatus and method for forming terminal connecting portion of conductor wires (Figs. 8a-c), comprising an upper mold (62) with a dome-shaped ceiling face (66) having a curvature to form a corresponding curve on the product (110), and a lower mold

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(60) having vertical side faces (both side of the cavity 64) and a bottom face (65) which defines a lower part of the molding cavity.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito (5,620,711).

Saito teaches a mold for forming a waterproof cable, comprising an upper mold (col. 3, lines 8-9) having an inner space provided with dome-like ceiling face (9), which defines an upper part of a molding cavity (7), a lower mold (1) having inner space provided with vertical side faces (both sides 15, 17 along the cavity 7) and a bottom face (7a, the bottom of the cavity 7); wherein the dome-like ceiling face of the upper mold has a curvature so selected as to be coincident with a curvature of on outer face of terminal fitting (39, col. 4, lines 4-10).

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al (*Applied Plastic Product Design*, Prentice-Hall 1946, page 74).

Davis et al teach a mold comprising an upper and lower mold halves (Fig. 4-29); wherein the upper mold half having a dome-shaped face corresponding with the forming product, and the lower mold half having vertical side faces and a flat bottom defining a lower part of the cavity; wherein the dome-shaped face has at least two radii of curvature along the cross sectional plane.

Response to Arguments

7. Applicant's arguments filed July 18, 2003 have been fully considered but they are not persuasive.

Richardson ('896) discloses that the mold cavity 4 is formed by sliding the mold block 9 into the mold block 3, which includes a bottom face 5 and vertical side faces 6. The Applicant

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has argued that the side portions 6 do not define a part of the mold cavity as required in the claims. This argument is not commensurate with the scope of the claims. The claims only require "a bottom face, which defines a lower part of the molding cavity".

Even if the claims have claimed that the side faces forming part of the mold cavity, by sliding the mold block 9 a small distance into the mold block 3 so that the side faces 6 just engage the tip of the ribs 8 on the mold block 9, the remainder of the side faces 6 would become part of the mold cavity. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). It has been held that a functional limitation asserted to be critical for establishing novelty may, in fact, be an inherent characteristic of the prior art. The applicants is required to prove that the subject matter shown in the prior art does not necessarily possess the characteristics relied on. In re Schreiber, 128 F. 3d 1473, 1478, 44 USPQ 2d, 1432 (Fed. Cir. 1997); See also, In re Spada, 911 F 2d 705, 708, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1977); In re Best, 562 F. 2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); and Ex Parte Gray, 10 USPQ 2d 1922, 1925 (Bd. Pat. App. & Int. 1989).

In regard to claim 2, the Applicant alleged that Richardson fails to disclose "*the dome-shaped ceiling face of the upper mold has a curvature that is coincident with a curvature of an outer face of the terminal fitting.*" The examiner has interpreted this statement as the dome-shaped face of the upper mold has a curvature corresponding to a curvature of an outer face of the product (terminal fitting) being formed inside the mold cavity. If this interpretation is correct, Richardson has already disclosed this feature.

In regard to Birchler et al, the Applicant asserted that the mold 60 is defined by a bottom face 65 and curved side faces, not vertical side faces. The side faces, however, are vertically curved faces (Fig. 5). Further, Birchler et al disclose that a mold cavity 148 is used to form an encapsulating material 158, which have a rectangular bottom and rectangular sides. Therefore, the mold in Birchler could also have straight vertical side faces, in order to form product 158.

Similarly, the Applicant argued that Sato discloses tapered surfaces, not vertical faces. Even the side faces 15, and 17 are curved; these faces are vertically curved faces and forming of the molding cavity. The drum-like mold of Sato could be divided into different parts that include a horizontally curve bottom and two vertically curve sides. Thus, Sato still anticipates the claimed apparatus.

In response to applicant's argument that Davis is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Davis discloses a mold for molding plastic material, which is in the field of the current invention. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In *re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (Emphasis in original)

Conclusion

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN
July 16, 2003


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300/1700

7/21/03